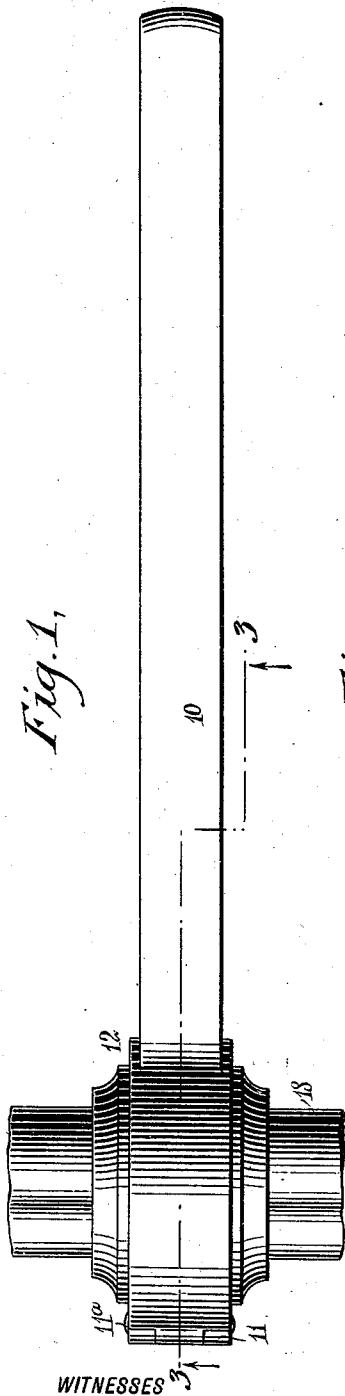


T. J. NICHOLSON.
PIPE WRENCH.
APPLICATION FILED SEPT. 27, 1910.

977,896.

Patented Dec. 6, 1910.



*Edward Thorpe,
P. A. Hoster*

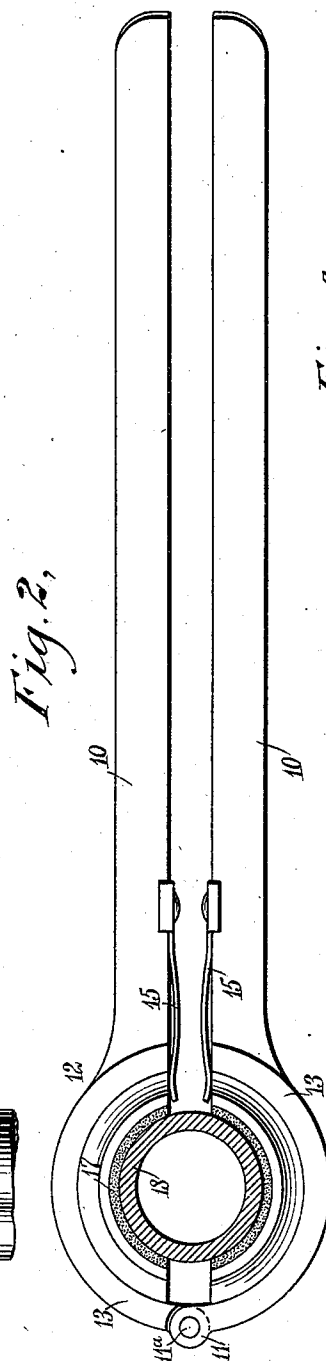


Fig. 4.

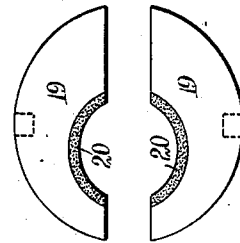
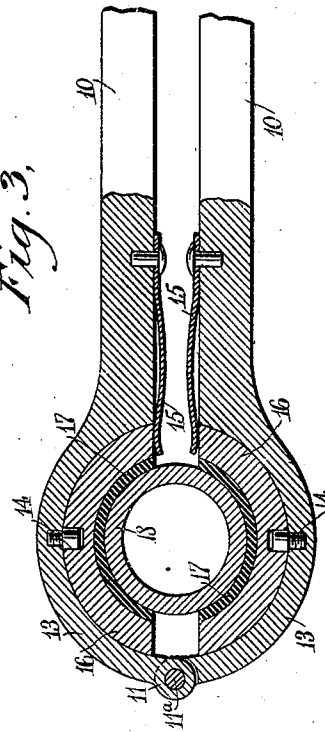


Fig. 3,



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THOMAS JAMES NICHOLSON, OF KINGSTON, ONTARIO, CANADA.

PIPE-WRENCH.

977,896.

Specification of Letters Patent.

Patented Dec. 6, 1910.

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To all whom it may concern:

Be it known that I, THOMAS J. NICHOLSON, a subject of the King of Great Britain, and a resident of Kingston, in the Province of Ontario and Dominion of Canada, have invented a new and Improved Pipe-Wrench, of which the following is a full, clear, and exact description.

The invention relates to wrenches and has for an object to provide a pipe wrench for gripping polished pipe without marring or injuring the surface thereof.

For the purpose mentioned use is made of a pair of pivoted handles terminating in a circular head adapted to detachably receive jaws having bearing surfaces for safely gripping polished pipe and springs secured to the handles and adapted to engage the jaws to hold the same in operative position in the said head.

Reference is to be had to the accompanying drawings constituting a part of this specification in which similar characters of reference denote corresponding parts in all the views, and in which—

Figure 1 is a side elevation showing my wrench gripping a pipe; Fig. 2 is a plan view of the same; Fig. 3 is a sectional view taken on the line 3—3 in Fig. 1 and disclosing the means for securing the jaws to the head; and Fig. 4 is a side elevation of a pair of jaws for attachment to the head of my device.

Referring more particularly to the views, I employ a pair of handles 10, pivoted at 11 by a pin 11^a, and terminating in a circular head 12 formed by integral portions 13 each formed on a handle 10. Secured to the head 12 are oppositely disposed pins 14 and secured to the handles 10 are longitudinally extending springs 15 adapted to project a short distance beyond one end of the head 12. Jaws 16 provided with bearing surfaces or pads 17 are provided to be detachably secured to the head 12 by means of the pins 14 and are substantially held in place by the ends of the springs 15 engaging the jaws 16 as will be easily seen in Fig. 3.

In use, the device described is applied to pipes by slipping the wrench over the pipe so that a portion thereof is incased in the head and gripped by the gripping pads 17.

These pads are preferably made of rubber so that when a polished pipe 18 is gripped the surface thereof will not be marred, while at the same time a substantially tight hold is secured on the pipe.

Various sized jaws may be used with the wrench described and in Fig. 4 I have disclosed a pair of jaws 19 provided with eccentrically disposed pads 20, thus making it possible to use my wrench on various sized pipes.

In order to enable my wrench to be used in places where there is very little room, I have employed a removable pin 11^a so that the handles 10 can be disengaged, fitted around a pipe as mentioned, and quickly re-connected.

Inasmuch as the greatest amount of wear, in the use of my wrench, is on the rubber surfaces or pads 17, the same can be easily removed when worn out and be quickly replaced by new pads.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. A pipe wrench comprising a pair of pivotally connected handles terminating in a circular head, pins secured to the head, jaws for detachable engagement with the head and adapted to engage the said pins, and springs secured to the handles and engaging the jaws to removably hold the same in the head.

2. A pipe wrench comprising a pair of pivotally connected handles terminating in a circular head, jaws for detachable engagement with the said head and provided with soft bearing surfaces whereby a polished pipe can be gripped without marring the same, oppositely disposed pins secured to the head and adapted to be engaged by the jaws, and longitudinally extending springs secured to the handles and engaging the jaws to removably hold the same in the head.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

THOMAS JAMES NICHOLSON.

Witnesses:

T. J. RIGNEY,
CLARE CORRIGAN.